

Clean Version of Pending Claims

INTERCONNECT
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Sub 7
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2. (Amended) An interconnect comprising:
a substrate;
a pad formed on the substrate; and
at least two vias coupled to the pad, wherein only one of the at least two vias is formed substantially beneath the pad.
3. The interconnect of claim 2, wherein at least one of the at least two vias is coupled to the pad by a conductive segment having a first end having a first width and a second end having a second width, the first end being connected to the at least one of the at least two vias and the second end being connected to the pad, and the first width being less than the second width.
4. The interconnect of claim 2, wherein the pad has at least five substantially straight edges and the at least two vias comprise three vias and only two of the three vias are coupled to the substantially straight edges.
5. The interconnect of claim 4, wherein at least one of the only two of the three vias coupled to the substantially straight edges is coupled to one of the substantially straight edges through a tapered conductive segment.

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21. The interconnect of claim 2, wherein the pad comprises copper.
22. The interconnect of claim 21, wherein the at least two vias comprise cylindrical conductors.

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cont.
23. An interconnect comprising:
a substrate;
a pad formed on the substrate; and
at least three vias coupled to the pad, wherein only one of the at least three vias is formed substantially beneath the pad.
24. The interconnect of claim 23, wherein at least one of the at least three vias is coupled to the pad by a tapered conductive segment.
25. The interconnect of claim 24, wherein the tapered conductive segment comprises copper.
26. The interconnect of claim 25, wherein the tapered conductive segment comprises a hyperbolic taper.
27. The interconnect of claim 26, wherein the pad comprises gold.
28. The interconnect of claim 27, wherein each of the at least two vias comprise triangular conductors.
29. An interconnect comprising:
a substrate;
a pad formed on the substrate; and
at least four vias coupled to the pad, wherein only one of the at least two vias is formed substantially beneath the pad.

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cont.
30. The interconnect of claim 29, wherein at least three of the at least four vias is coupled to the pad by a tapered conductive segment.
31. The interconnect of claim 30, wherein the tapered conductive segment comprises aluminum.
32. The interconnect of claim 31, wherein the tapered conductive segment includes an exponential taper.
33. The interconnect of claim 32, wherein the pad comprises tungsten.
34. The interconnect of claim 33, wherein each of the at least four vias comprise square conductors.
35. An interconnect comprising:
a substrate;
a pad formed on the substrate; and
at least five vias coupled to the pad, wherein only one of the at least five vias is formed substantially beneath the pad.
36. The interconnect of claim 35, wherein the pad comprises silver.
37. The interconnect of claim 36, wherein the at least two vias comprise hexagonal conductors.
38. A method of forming an interconnect, the method comprising:
forming three vias in a substrate;

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forming a conductive layer above the three vias; and
etching the conductive layer to connect each of at least two of the three vias to the
conductive layer through a tapered conductive segment.

39. The method of claim 38, wherein forming three vias in a substrate comprises forming
three triangular vias in the substrate.

40. The method of claim 39, wherein etching the conductive layer to connect each of at least
two of the three vias to the conductive layer through a tapered conductive segment comprises:
etching a tapered conductive segment having a hyperbolic taper.
